

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,195	04/22/2004	Tan Yin Leong	1027.P008US/CKM/ayu	5529

7590 03/22/2005

George D. Liu  
Lawrence Y D Ho & Associates  
PMB 400  
2101 Crystal Plaza Arc  
Arlington, VA 22202

EXAMINER

NGUYEN, TUNG X

ART UNIT

PAPER NUMBER

2829

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

RECEIVED  
10 7 APR 2005

DOCKETED (fmy)  
duedate:



H.A

**Office Action Summary**

Application No.

10/829,195

Applicant(s)

LEONG, TAN YIN

Examiner

Tung X. Nguyen

Art Unit

2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 April 2004.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-10 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

1. The abstract of the disclosure is objected.

"FIG. 2 accompanies the abstract." In the abstract page should be deleted.

Correction is required. See MPEP § 608.01(b).

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Ludwig (u.s.p 5,594,355).

As to claim 1, Ludwig disclose in Figs. 4-6, a probe (106 of figure 4) for connecting a device under test (202 of figure 4) with at least one trace of test circuitry (116 of figure 5) comprising: a body (514, 516, 512, 106 of figure 4-5); a contact area (512 rocks or pivots on the trace col. 6, lines 10) with plurality of contact points to contact said at least one trace (116); at least one arm (514, 516 of figure 4-6) for engaging at least one lead (204 of figure 4-5) of the device under test (202); at least one means (508 of figure 5) of receiving at least one spring means (108 of figure 5); and at least secondary support means (110 of figure 5) with a elastomer band (108 of figure 5) is seated on the groove (508 of figure 5) formed in the top of the probe (106 of figure 5)

whereby probe (106) can maintain electrical contact with the at least one trace as said at least one trace is worn with use (col. 6, lines 1-25, lines 64-67).

As to claim 2, Ludwig discloses in Figs. 4-6, the shape of the body may be varied to enable the probe to fit in a test socket (col. 6, lines 10-15).

As to claim 3, Ludwig discloses in Figs. 4-6, the plurality of contact points may be on a continuous curve (512, col. 6, lines 5-10).

As to claim 6, Ludwig discloses in Figs. 4-6, the contact area of the said arm engaging the lead is cross-hatched (110, 114 of figure 5)

As to claim 7, Ludwig discloses in Figs. 4-6, at least one means of receiving at least one spring means is a notch (508 of figure 5).

As to claims 8-9, Ludwig discloses in Figs. 4-6, the at least secondary support means is a curved leg, a loop (508 of figure 5).

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4-5, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ludwig (u.s.p 5,594,355), in view of Hilz (u.s.p 4,841,241).

As to claims 4-5, Ludwig discloses in Figs. 4-6, all of limitation except for the plurality of contact points may discrete bumps on the contact area, the contact area is

Art Unit: 2829

toothed. However, Hilz discloses in Figs. 3, the plurality of contact points may discrete bumps on the contact area (Kn1, Kn2 of figure 3) for the good contact between the probe and the device under test. Therefore, It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system of Ludwig, and provide the discrete bumps on the contact area, as taught by Hilz for the good contact between the probe and the device under test.

As to claim 10, Hilz discloses in Fig. 3, at least secondary support means is W-shaped (Kn1, Kn2 of figure 3).

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung X. Nguyen whose telephone number is (571) 272-1967. The examiner can normally be reached on 8:30am-5:00pm M-F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (571) 272-2034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/829,195  
Art Unit: 2829

Page 5

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TN  
3/14/05

  
VINH NGUYEN  
PRIMARY EXAMINER  
A.U. 2829A  
03/17/05



<b>Notice of References Cited</b>	Application/Control No. 10/829,195	Applicant(s)/Patent Under Reexamination LEONG, TAN YIN	
	Examiner Tung X. Nguyen	Art Unit 2829	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-4,841,241 A	06-1989	Hilz et al.	324/754
	B	US-4,417,206 A	11-1983	Stowers, Jeffrey P.	324/756
	C	US-5,594,355	01-1997	Ludwig, Kevin E.	324/755
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.